

Dale Jacquette*

Against Logically Possible World-Relativized Existence

Abstract: The thesis that entities exist in, at, or in relation to logically possible worlds is criticized. The suggestion that actually nonexistent fictional characters might nevertheless exist in nonactual merely logically possible worlds runs afoul of the most general transworld identity requirements. An influential philosophical argument for the concept of world-relativized existence is examined in Alvin Plantinga's formal development and explanation of modal semantic relations. Despite proposing an attractive unified semantics of alethic modality, Plantinga's argument is rejected on formal grounds as supporting materially false actual existence assertions in the case of actually nonexistent objects in the framework of Plantinga's own underlying classical predicate-quantificational logic.

Keywords: Modal logic and semantics; Plantinga, Alvin; possible worlds semantics; transworld identity conditions; world-relativized existence

***Corresponding author: Dale Jacquette**, University of Bern, Switzerland, Institute for Philosophy, Division for Logic and Theoretical Philosophy, E-mail: dale.jacquette@philo.unibe.ch

World-relativized existence

Sherlock Holmes does not actually exist because there is no complete object with all the relevant properties associated with Holmes as belonging to his distinctive character. There is no definite answer as to how many hairs Holmes has on his knuckles, for example, his exact eye color, or the like, as there is in the case of every actually existent relevantly predicationally complete person.¹

Modal theorists sometimes describe the logical possibility of contingent incompletely characterized fictional and other nonexistent objects as existing *in, at, or in relation to* nonactual merely logically possible worlds, where the objects' relevant property gaps in the actual world are all consistently completed

¹ I do not further define the concept, but the idea of relevant predicationally completeness or incompleteness is suggested in a negative way by the example that it is not a relevant predicationally incompleteness on the part of Sherlock Holmes, who is supposed to be a human being, to be neither prime nor non-prime, neither even nor odd, just as it is not a relevant predicationally incompleteness for the abstract number π to be neither blue-eyed nor non-blue-eyed.

or satisfied. The concept of an actually nonexistent object existing in, at, or in relation to another imagined or stipulated logically possible but nonactual world is intuitively attractive, but turns out to be logically more problematic than first appears.²

It is easy to say, but harder to defend the proposition, that Sherlock Holmes, though actually nonexistent, exists in, at, or in relation to another nonactual merely logically possible world. There, away from actual prying eyes, it is sometimes imagined, Holmes has the tidied-up properties mostly logically consistently attributed to him by Arthur Conan Doyle. The core of Holmes's properties supplied by Doyle is then further supplemented by whatever additional properties are needed to make Holmes relevantly predicationally complete rather than incomplete, in each world where he exists, and as we understand him to be relative to the actual world. There Sherlock Holmes solves crimes, practices the violin, drinks claret with Dr. Watson, shoots a little cocaine, and participates in the events that Doyle describes, and many more besides, just as a real person would.

If the model works, then there must also be supposed to exist in other worlds distinct Sherlock Holmes's completed in different ways by means of other sets of properties that Doyle did not authorize in his stories, but that branch out from the original trunk of Doyle's Sherlock Holmes tales in a logical space of fictional possible worlds. Applied philosophical modal logic may thereby seek to incorporate many interesting spin-offs of the basic premises and background assumptions of Doyle's original adventures. If an eye color-unspecified Holmes relative to the actual world can be completed in another logically possible world among other ways by virtue of having blue eyes, then he can also be completed in another logically possible world by virtue of having green eyes. Similarly for any of Holmes's presumably accidental properties left unspecified by the original authoritative sources for the Holmes character.

Modal transworld identity conditions

There are conceptual transworld identity problems for actually nonexistent objects that are not only glitches or recalcitrant annoyances in the conceptual

² My conclusions are largely in accord with and some my terminology and concepts are freely adopted from Kripke (1980, especially pp. 15–20, 42–53, 76–7). I am critical of Kripke's actualism in modal semantics, but interested in tracking similar conclusions from very different assumptions.

foundations of the logically possible worlds model to be cleared up in an afternoon. They are rather so pervasive and serious as to disable the projection of an actually nonexistent Holmes into nonactual merely logically possible worlds where relevant predicationally completed variants of Holmes may otherwise be imagined to exist.

What must be said of the conceivable situation in which an actually nonexistent relevantly predicationally incomplete Holmes is completed in *two different ways*, with blue eyes in one completion and green eyes in another completion, in the *same* nonactual merely logically possible world? Which one then is identical to the fictional Holmes, if both cannot be identical to Doyle's detective? There is no logical significance to favoring blue eyes over green, or the reverse. If we find it philosophically intriguing to consider Holmes split into two persons in one nonactual merely logically possible world, then we must sober up to the thought that Holmes must then be split into indefinitely many persons in each of indefinitely many logically possible worlds. The Plantinga existence-at-a-world semantics so easily gets conceptually out of hand, whereupon identity and transworld identity expectations become the first and costliest sacrifices.

The suggestion is that we would probably do better to rethink Plantinga-style existence-at-a-world modal semantics than to needlessly modify Leibnizian inter- and intra-world identity requirements. That is to say the intuitive intensional property-based actual and transworld identity conditions for all intended objects, independently of their ontic status. The possible worlds model of modalities is caught off-guard with respect to these questions, whenever the idea in its full implications is pressed that there *exist* logically possible objects in, at, or in relation to the actual world, in the case of existent objects, and in, at, or in relation to nonactual merely logically possible worlds, in the case of actually nonexistent objects.

Since Plantinga's logically possible worlds are mutually indistinguishable in ontic status in, at, or relative to those worlds, ours of necessity included, there can be no Plantinga-style modal semantic interpretation of any non-consciousness-dependent property that makes our world ontically different from any other logically possible world. The same applies to the existence of actual world objects that are always actually existent in, at, or in relation to the actual world, and to nonexistent objects in, at, or in relation to nonactual merely logically possible worlds. Something like this is what we want to be able to say. However, we can do so with confidence only outside of Plantinga's modal semantics, where there is no provision for interpreting the world of psychological experience as the actual world of existent things, places, times, persons, events, and their properties.

Nor is understanding the logic of fiction, or even the semantics of factually false but sometimes widely accepted scientific theories and hypotheses, along with false historical narratives, the only or even the best, most important or worthwhile motivation or justification for speaking of the possible existence of actually nonexistent objects. We may begin with fiction, considered meaningful, even if it deliberately does not try on the whole to represent the extant facts of the actual world. David Hume remarks in a similar vein that reading some works of fiction in and of itself is indistinguishable (phenomenologically, we might add) from reading history in which by contrast we typically invest belief.³ We may think here especially of works like Daniel Defoe's (1722) *A Journal of the Plague Year*, as exactly answering this description. Hume would surely want to include many additional works of fiction and history in developing the comparison.

We may then proceed to consider idealizations in science that are actually uninstantiated. Ideal gasses, perfectly rigid levers and fixed fulcra, projectiles moving in space unimpeded by impressed forces, and countless other idealizations, appear to be indispensable to the meaningful useful formulation of scientific laws in applied mathematics, and are understood only to be approximated in the phenomenal order we experience in perception. These are not fictions, but they are similarly meaningful expressions that make ostensible reference to things that do not actually exist in linguistic usages that are exactly parallel to those adopted in ordinary case of predications made true by existent facts. Is there supposed to be a nonactual merely logically possible world where the ideal gas exists? Or is that not the point of predicating properties of physical idealizations?

Plantinga on existence in, at, or in relation to a nonactual merely logically possible world

The interesting question is whether it is sensible to speak of an actually nonexistent object *possibly* existing, in the sense of existing in, at, or in relation to, a nonactual merely logically possible world. We shall conclude in the negative,

³ David Hume, *An Enquiry Concerning Human Understanding* in Hume (1975, 47): “[Imagination] can feign a train of events, with all the appearance of reality, ascribe to them a particular time and place, conceive them as existent, and paint them out to itself with every circumstance, that belongs to any historical fact, which it believes with the greatest certainty. Wherein, therefore, consists the difference between such a fiction and belief?” See also Hume’s remarks, pp. 48–50.

having considered critically Alvin Plantinga's vintage but still powerful argument for the contrary view in his 1974 book, *The Nature of Necessity*.

Plantinga's careful but ultimately problematic effort to characterize the concept of an object existing in, at, or in relation to a logically possible world appears prominently in Plantinga's discussion, when he writes:

Objects or individuals *exist in* possible worlds, some like Socrates existing in only some but not all possible worlds, and others, like the number seven, existing in every world. To say that an object *x* exists in a world *W* is to say that if *W* had been actual, *x* would have existed; more exactly, *x* exists in *W* if it is impossible that *W* obtain and *x* fail to exist.⁴

Plantinga's conditional principle is first more exactly formulated. When this is done, it emerges that there are at least two logical problems in Plantinga's statement of a condition for objects actually existing in, at, or in relation to a nonactual merely logically possible world. The same two problems are not peculiar to Plantinga, but inherent in the general concept of existence in, at, or in relation to any nonactual merely logically possible world, that many modal logicians and philosophers interested in applied modal semantics have been eager to make. Plantinga, accordingly, serves as a convenient spokesperson for a widespread assumption in the metaphysics of modality. The objections are these.

First, the subjunctive or counterfactual reference to a logically possible world being actual or instantiated, on which Plantinga's concept depends (paraphrasing, with emphasis: *if*, counterfactually, world *W* *had* been actual), seems to have no interpretation except as the strangely iterative *logical possibility* of the actuality or obtaining of a logically possible world. This proposition in turn seems to imply that there is a logically possible world in which a logically possible world is actual or actually instantiated or "obtains". Such a conclusion is hard to understand, because it appears further to require that at least some logically possible worlds themselves exist, or, again, obtain, in, at, or in relation to, at least some logically possible worlds. The model implies that possible worlds are themselves logically possible objects belonging to *other* logically possible worlds. Plantinga, on the contrary, maintains explicitly only that every logically possible world is actual *in* or *at itself*. The confusion is compounded when Plantinga adds: "There are any number of merely possible worlds; each of them exists—exists in the actual world—although none is actual ... That is to say, none of these merely possible worlds is in *fact* actual.

⁴ Plantinga (1974, 46). Plantinga's world-relativized existence-at-a-world modal semantics is the polar opposite of Kripke's modal actualism.

But of course each is actual at or in itself. Each world W has the property of actuality in W (and nowhere else).⁵ The difficulty of understanding the unique ontic status of the actual world as contrasted with nonactual merely logically possible worlds in Plantinga's modal philosophical semantics is endemic, and in that sense inherent in and ineliminable from his pronouncements about world-relativized existence or actuality, actual existence, in this part of his book. It is in the name of a high-maintenance ontic relativism that Plantinga argues for the actual existence of actually nonexistent objects, that, relative to other merely logically possible worlds, actually exist, in the sense of being actually existent in, at, or in relation to those (as it happens, nonactual) worlds.

Second, given the classical background logic of Plantinga's modal philosophical semantics, there appears to be a logical infelicity in the proposal by which Plantinga holds "more exactly" that " x exists in W if it is impossible that W obtain and x fail to exist". Certainly, if objects exist in, at, or in relation to possible worlds, then, in the specific case of the actual world, the objects it contains must actually exist. To say that it is logically *impossible* for a logically possible world to obtain and the objects it contains to fail to exist lacks interpretation, unless it is understood to mean that there is no logically possible world in, at, or in relation to which a logically possible world obtains, and the objects the world contains do not exist. All that is needed for actual existence in, at, or in relation to a logically possible world, as Plantinga proposes, is belonging to a world that could counterfactually be actual. That seems more like the concept of counterfactual existence in, at, or in relation to a nonactual logically possible world, rather than world-relativized actual existence in or at a world in question. Plantinga defines the existence of an object in a world in terms of a preavailable concept of modality, citing the impossibility of a certain conjunction. Insofar as Plantinga's description makes sense, despite its innocent appearance, it seems by standard modal and quantificational duality to involve existence-at-a-world semantics and ontology in logically counterintuitive consequences.

Formal objection to Plantinga's concept

Adapting Plantinga's notation to a simplified and generalized version of the conventions he proposes, we let " $@w_i$ " mean that a logically possible world w_i is *actual*, " $E!o_{w_i}$ " that object o exists in, at, or in relation to world w_i , " $w_{@}$ " the

5 Ibid., p. 48. Among resources in this field see Forbes (1985), Chihara (1998), and Garson (2006).

actual world, and “s”, beloved of philosophers, the actually nonexistent but supposedly possibly existent fictional object, Sherlock Holmes. We introduce as background assumption the material fact that Sherlock Holmes does not actually exist:

0. $\neg E!s$

We allow world indexing, as above, to be linked to the worlds in a domain by world-designating subscripts. Where R is a relation, in this case, between a proposition and any object that has property F , we formally reduce convenient intuitive possible world indexing to a quantificational equivalent, by means of the principle that,

$$\forall x[[Fx \rightarrow p_x] \leftrightarrow [Fx \rightarrow [Rpx \rightarrow p]]].$$

Reading the universal quantifier as ontically neutral, as presumably we must if Plantinga’s principle is to apply also to actually nonexistent objects across logically possible worlds, we can formalize Plantinga’s statement of his general principle and the particular application to Holmes in the following way:

$$1. \forall x \forall w_i [\neg \Diamond[@w_i \wedge \neg E!x] \rightarrow E!x_{w_i}]$$

Instantiating universals by the glossary above for Sherlock Holmes, s , and applying modal duality, implies the equivalent:

$$2. \Box \neg[@w_{@} \wedge \neg E!s] \rightarrow E!s_{w_{@}}$$

The proposition in (2), however, is classically logically reducible to the following equivalent:

$$3. \Box[@w_{@} \rightarrow E!s] \rightarrow E!s_{w_{@}}$$

Standard modal distribution of \Box over \rightarrow in the antecedent of (3) now yields the logically equivalent proposition:

$$4. [\Box @w_{@} \rightarrow \Box E!s] \rightarrow E!s_{w_{@}}$$

Classical propositional equivalence in turn implies that (4) is logically equivalent to:

$$5. [\neg \Box @w_{@} \vee \Box E!s] \rightarrow E!s_{w_{@}}$$

If we now assume that it is not logically necessary for the actual world in all its particularity to be actual, allowing that some logically possible world other than

the actual world, such as the world where Sherlock Holmes supposedly exists, might have been actual instead, then it is independently true that:

6. $\neg \Box @w@$

There is no contradiction in (6), because the index $@$ in $w@$ serves to designate a logically possible world specifiable in terms of a set of contingently true propositions. The predicate $@$, in contrast, is applied to a term for any logically possible world in order to truly or falsely assert that the designated world is actual.

Proposition (6) states only that it is not logically necessary for the actual world as it exists with all its objects and their properties to be actual, or to have been actualized. Another world than the actual world as a total set of truths could have been actual, would have been the actual world instead, if any of those truths were altered and replaced. It is only logically contingently true that $F = ma$, for example, supposing it to be true at all, if its negation $F \neq ma$ does not imply a *logical* contradiction of the syntactical form, $p \wedge \neg p$. Equally, it can only be so if $F = ma$ is a tautology. However, physical laws describe correlations of phenomenal factors that are not even synthetic *a priori*, but hard-won observational, hypothetical, repeatedly tested and challenged, explanatory contributions to logically contingent empirical science. The principles that qualify as laws have usually survived hazardous dialectical environments through which they continue to hold true, but they are not usually thought to be logically necessarily true. If they were, their truths, contrary to fact, could be established by pure reasoning.

By logical addition, it follows from (6) that:

7. $\neg \Box @w@ \vee \Box E!s$

From (5) and (7) by detachment, we arrive at the intuitively disastrous conclusion that Sherlock Holmes exists in the actual world, in contradiction with known facts represented by background assumption (0):

8. $E!s_{w@}$

Whatever is considered responsible for the paradox of $E!s_{w@} \wedge \neg E!s_{w@}$, Plantinga's ontically loaded modal existence-at-a-world semantics should not escape critical attention. We might choose to rethink existence-at-a-world semantics, if not first, then anyway before raising objections and seeking an alternative to the classical logic underlying basic modal logics, including the modal formalism Plantinga develops, or investing energy in like disproportionately drastic

measures of nonstandard, nonclassical this or that, purely for the sake of technically avoiding the contradiction in the deductive argument numbered (0)–(8).

Interpretation and criticism of the paradox

There may be several ways to interpret the logical difficulty in Plantinga's explication of an actually nonexistent object existing in, at, or in relation to a nonactual merely logically possible world. The main symptom is that Plantinga's modal semantics does not adequately explain the ontic uniqueness of the actual world.

Infinitely many *existent* me's are spread across as many logically possible worlds, if Plantinga's model is applied to such an individual actually existent entity as myself. Or else they are in some sense Dale Jacquette's, but not me's, none of them being *me*. The thought of so many Dale Jacquette's offends not only against an austere minimalist aesthetic of desert landscape ontology, which I whole-heartedly approve. A minimalist ontology is preferable especially in my own case, at least as far as the *ontology* is concerned, in that part of a complete referential semantic domain. The trouble is that in Plantinga's modal semantics there is no obvious way to interpret as true the proposition that, unlike the other me's or Dale Jacquette's, I am really actually existent, or even, with or without italics, in *fact* actually existent. Perhaps table pounding is in order, although it proves nothing because every existent Dale Jacquette in every logically possible world can do the same, given the existence of tables and the requisite fists in those worlds. The other Dale Jacquette's exist in, at, or in relation to their actual worlds, just as I exist in, at, or in relation to my actual world. What, then, privileges *my* actual world as *the* actual world, or as the *in fact* actual world? It cannot be my contingent psychological awareness or consciousness of the fact that I exist. The same will be equally true of all my other selves or all the other rigidly designated Dale Jacquette's in all other logically possible worlds where Dale Jacquette exists.

These distinct entities would all appear logically possibly to be, and hence, many of them presumably are, consciously aware of their logically contingent existence in the logically possible worlds that they inhabit. If the world in which I reside, contingently existent psychological entity that I am, is the real or in *fact* actual world, does it not follow then that all of modal logic, constructively including all of classical logic, must rest on a logically contingent psychological fact of the modal theorist's or logic practitioner's occurrent self-conscious

self-reflective self-existence predications? Logic itself then depends on the contingent existence of persons entertaining self-conscious thoughts of their own self-existence as real or ideal episodes of psychological experience. Is that what is wanted in philosophical logic and semantics? The picture is not only intrinsically intuitively implausible, but it seems to embody precisely the philosophically objectionable psychologism that our ancestors in the field struggled to defeat. Perhaps, after all, it is time for anti-psychologism to step aside, and for a popular trend in philosophy to encourage psychologism of a sort to develop in its own way for a time. If so, and if anti-psychologism is destined relatively soon to become passé, then one imagines rather more should be made of the fact by adherents of Plantinga's modal existence-at-a-world semantics. If not, then we should want to know more exactly why such grounding in logically contingent psychological occurrences of the fundamental logical distinction between the actual world and all nonactual merely logically possible worlds does not qualify as a philosophically objectionable psychologism.

Psychologism and ontic privilege of the actual world

There is an informal problem of identity conditions in Plantinga's modal semantics. Plantinga's existence in, at, or in relation to logically possible worlds thesis implies that there exist nonactual worlds, presumably infinitely or anyway indefinitely many, where, in, at, or in relation to which, I claim just as I do here and now in what I take to be the actual world that I believe to actually exist, perhaps by appealing to something like the vivacity of my occurrent perceptual experience. If this is psychologism, then what happens when some modal theorists try to make the most of it?

To return to my personal case, I am a card-carrying rigidly designated legally baptized and fully causal-historical intended usage chain originating ultimate referential object. I actually exist, and you can refer to me all you want. The trouble is that in Plantinga's modal semantics, any other actually existent Dale Jacquette in, at, or in relation to any other accessible logically possible world, can in principle and as truly and sincerely tell a transworld traveler exactly the same thing. The transworld traveler will nevertheless be learning this general fact from supposedly accidentally distinct Dale Jacquette's. By Leibniz's indiscernibility of identicals, these transworld differences among rigidly designated Dale Jacquette's must mean that there as many distinct actually existent Dale Jacquette's in, at, or in relation to at least as many logically possible worlds.

The only remedy is for these distinct properties to be themselves world-indexed when predicated of actually existent Dale Jacquette's in, at, or in relation to each distinct logically possible world. If such world indexing is undertaken, the immediate consequence is effectively to collapse all of the Dale Jacquette's existing in distinct logically possible worlds into any chosen Dale Jacquette in any chosen logically possible world. Dale Jacquette in that world will then have all the world-indexed accidental differences of properties that we can then more economically characterize as belonging to the chosen singleton Dale Jacquette in that logically possible world. Plantinga's semantics implies that it is not just I, actually existent entity that I pride myself on being, that have various possibilities among my properties, but, if correctly and sympathetically interpreted, that there are indefinitely if not infinitely many logically possible worlds in, at, or in relation to which, I or Dale Jacquette actually exist, and that in any case these are distinct worlds that, according to Plantinga, are actual or actually exist in, at, or in relation to themselves.

Where, then, and how, can we break out of the world-relativized actual existence bubble to reference our real or in fact actual existence, even if only momentarily, without surrendering to psychologism at the theoretical foundations of modal logic? The answer to which Plantinga gestures, that there is an ontically decisive distinction between what is in *fact* actually existent and what is not in *fact* actually existent, does not appear to advance the inquiry, when compared with distinguishing more simply between what is existent and what is not existent, and where existence is absolute rather than relativized to what is intended to be an ontically meaningful but formally inexpressible distinction between specific actual or nonactual merely logically possible worlds.

Ontic excesses of world-relativized existence

Should we care? What is the difference if so many distinct Dale Jacquette's exist prolifically in distinct logically possible worlds? They shall all have to take care of themselves, and I shall know nothing more of them, except by reputation, just as they shall know nothing of me. What does it matter if they exist in addition to my having as many distinct counterfactual possibilities among my actual properties? My transworld Doppelgängers are welcome to proclaim with equal justice and as energetically their actual existence and the actuality of their worlds, in, at, or in relation to which, according to Plantinga, they actually exist, despite in fact not actually existing.

We know what Plantinga needs and wants to say. His modal semantics traitorously prevents him from being able to meaningfully declare that there are existent and nonexistent objects and actual and nonactual worlds, once he allows the existence of existent and actually nonexistent objects in, at, or in relation to distinct logically possible worlds. The further objection is that it seems excessively ontically lavish to tolerate so many distinct logically possible world relative existent entities, so many Dale Jacquette's, in the example, when there are strikingly more ontically economical alternatives available. Surely Plantinga's modal semantics cries out for Ockham's razor to mow down the explanatorily superfluous postulated existent entities with which his semantics over-populates all logically possible worlds. Why not, especially when the modal dimensions of Plantinga's semantics are explicitly ontically inflationary to an even greater degree than Plato's beard sprouted from the roots of the third man argument, for which Ockham's razor in philosophical folklore was first honed? It seems like rather a lot of entities required in Plantinga's semantics in order to formally interpret logical possibilities.

Logical possibilities might better be modeled as managed syntactically, anyway. This can be done by algorithmic Turing machine selections of contradiction-free proposition base expansions from random starting sets of individual logically contingent propositions. Possibilities are then constructed by means of conjunction or logical multiplication, in which each such expansion describes a distinct logical possibility, and their consistent completions describe logically possible worlds.

We further emphasize the objection's point by remarking again that the troublesome inference in (0)–(8) above cannot be reasonably forestalled by brute exclusion of the actual world from the domain of all logically possible worlds. We should reject the revision of proposition (1) that holds instead:

$$1^*. \forall x \forall w_i [w_i \neq w_{@} \rightarrow [\neg \Diamond[@w_i \wedge \neg E!x] \rightarrow E!x_{w_i}]]$$

If we *exclude* the actual world from the domain of all logically possible worlds in applying Plantinga's conditional characterization of an object existing in, at, or in relation to a logically possible world, then we are bereft of the formal resources needed for understanding what it means for actually existent objects to exist in, at, or in relation to the actual world.

No modal semantics can be considered adequate if it does not explain the uniqueness of actual existence, or make provision for the intent of Plantinga's desperate reference to in fact actual existence. If Plantinga did not count actual existence as a theoretical property of logically possible worlds and their objects in, at, or in relation to themselves, then we could shave Plantinga's existent entities down to those belonging to one world only, all others being possible but

nonexistent, and no question would remain as to which logically possible world is the one and only existent world. It will be the world in which we think these existent thoughts about existent and nonexistent objects, but it will not owe its actuality psychologically to the fact that we think, even assuming such a proposal to be intelligible.

There seems, in consequence, to be no logically coherent fully general way of interpreting or applying Plantinga's concept of an actually nonexistent object existing in, at, or in relation to an alternative nonactual merely logically possible world. At a deeper level, taking these terms with their meanings in Plantinga's modal semantics, the more fundamental problem is that Plantinga's logic has no non-psychologistic way of distinguishing a uniquely actual existence from among the totality of actual existences relative to any logically possible world. The most that Plantinga can do, as he does above, is to say that "none of these merely possible worlds is in *fact* actual". An appeal to facts, however, still does not give us a firm anchor in reality, since all facts in Plantinga's semantics, like actual existence, are equally world-relativized. Which world of facts is meant by such a phrase, unless it is indexically the world in which there occur the self-conscious thoughts of the modal theorist? If there is supposed to be just one real in *fact* actual world with real in *fact* actually existent entities, then there must be a conceptual basis for distinguishing reality from merely logically possible but nevertheless ontically relativized actual existence in, at, or in relation to each and every logically possible world.

That is the part that sounds roughly right in the above quotation from Plantinga. It does so tentatively at best, however, only insofar as we stand outside of Plantinga's modal semantics. Trouble results when we put the above statement together with Plantinga's further assertion, "But of course each [world] is actual at or in itself". He thereby throws open the door to inferring with equal justice that each logically possible world is in *fact* actual and its objects actually existent at or in itself, even though no logically possible world in Plantinga's modal semantics stands out logically in any way as ontically privileged. Plantinga in the concluding note of the quotation acknowledges it implicitly that each logically possible world is actual at or in itself. What do facts give us, then, that actuality or existence, even actual existence, do not? To iterate new terms like "actually", "in *fact*", or "real", as though we were substantively qualifying the same concept of existence until we reach the real thing, can only pretend to stake a claim to unqualified actuality. By Plantinga's own modal semantics and underlying classical logic, he is thereby committed to holding that the same must equally be true of intelligent actually existent inhabitants of, in, at, or in relation to, any other in *fact* nonactual merely

logically possible worlds. Actuality itself remains elusive where actual existence is universally world-relativized.

The key modal distinction between the actual world and other nonactual merely logically possible worlds in a non-Plantinga sense can then simply be existence versus nonexistence. We are logically on firm ground as long as we do not depend upon the thesis that objects are actually existent in, at, or in relation to nonactual merely logically possible worlds, as Plantinga also obviously intends, and that nonactual merely logically possible worlds are reflexively actual in, at, or in relation to themselves. If Plantinga's model, to conclude, is, as appears, the best that we can do in trying to make sense of the suggestion that actually nonexistent objects like Sherlock Holmes with their inherent trans-world identity conditions can exist in, at, or in relation to nonactual merely logically possible worlds, then there is unlikely to be a better way of implementing world-relativized existence in modal philosophical semantics.⁶

References

- Chihara, C. 1998. *The Worlds of Possibility: Modal Realism and the Semantics of Modal Logic*. Oxford: The Clarendon Press.
- Forbes, G. 1985. *The Metaphysics of Modality*. Oxford: The Clarendon Press.
- Garson, J. W. 2006. *Modal Logic for Philosophers*. Cambridge: Cambridge University Press.
- Hume, D. 1775. *Enquiries Concerning Human Understanding and Concerning the Principles of Morals*. Reprinted from the 1777 edition with Introduction and Analytical Index by L.A. Selby-Bigge. 3rd Edition with text revised and notes by P.H. Nidditch. Oxford: Oxford University Press.
- Jacquette, D. 2005. "Nonstandard Modal Semantics and the Concept of a Logically Possible World." *Philosophia Scientiae* 9, 239–258.
- Jacquette, D. 2006. "Animadversions on the Logic of Fiction and Reform of Modal Logic." In *Mistakes of Reason: Proceedings of a Conference in Honour of John Woods*, edited by Kent A. Peacock and Andrew D. Irvine, 49–63. Toronto, ON: University of Toronto Press.
- Jacquette, D., and G. Imaguire, eds. 2010. *Possible Worlds: Logic, Semantics and Ontology*. Munich: Philosophia Verlag.
- Kripke, S. A. 1980. *Naming and Necessity*. Cambridge: Harvard University Press.
- Plantinga, A. 1974. *The Nature of Necessity*. Oxford: The Clarendon Press.

⁶ I further discuss the metaphysics of possible worlds semantics in Jacquette (2005), special issue on "Aperçus philosophiques en logique et en mathématiques", edited by Gerhard Heinzmann and Manuel Rebuschi, pp. 239–58. Jacquette (2006, 49–63). Jacquette, "Propositions, Sets, and Worlds", *Studia Logica: An International Journal for Symbolic Logic*, special double issue "Ways of Worlds" on 40 Years of Possible Worlds Semantics, Vol. 1: On Possible Worlds and Related Notions, edited by Vincent F. Hendricks and Stig Andur Pedersen, 82, 2006, pp. 337–343. See also Jacquette and Imaguire (2010); especially, "Introduction: Logical Possibilities and the Concept of a Logically Possible World", pp. 15–22.